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REMARKS

Applicant appreciates the attention of the Examiner to the application. The Office Action of the Examiner of December 7, 2005 has been reviewed with care in the preparation of this response. The amendment above and the following remarks are believed to be fully responsive to this action.

Status of Claims

Claims 1-5, 8-10, 15-23 are pending. Applicant appreciates the indication of allowable subject matter in claims 4, 5, 12, 13, 15, 16, 18, 19, 22 and 23. Claims 6-7 and 11-14 have been cancelled. The pending claims set forth a novel and non-obvious impact-absorbing level and method of providing impact-absorption to a level. Allowance of all pending claims is respectfully requested in view of the above amendment and the following remarks.

Claims 1, 7, 8 and 21 were rejected under 35 U.S.C. §102(b) as being anticipated by Wedemeyer (U.S. Patent No. 6,381,859). Claim 3 was rejected under 35 U.S.C. §103(a) as being unpatentable over Wedemeyer in view of Kelch et al. (U.S. Patent No. 5,356,705). Claims 1, 2, 9, 10 and 17 were rejected under 35 U.S.C. §103(a) as being unpatentable over Provi (U.S. Patent No. 3,921,306) in view of Wedemeyer.

Applicant thanks the Examiner for the telephonic interview with counsel on February 9, 2006. A discussion was held during this interview regarding the present Office Action and possible amendment to independent claims 1, 9 and 17. In response to this discussion and the comments made by the Examiner, Applicant has prepared and hereby submits the above amendment to the claims.

The amendment above amends claims 1-2, 5, 8-10, 15-17 and 21-23 and cancels claims 7, 12 and 13. The amendment is fully supported by the specification to the application and does not include any new matter. The pending claims, as amended, are not rendered unpatentable by the references cited by the Examiner but are patentably distinguishable over such prior art.

Applicant now turns to the particular points raised by the rejections in the Office Action of December 7, 2005.

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Rejection of Claims 1, 7, 8, and 21 under 35 U.S.C. §102(b)

Independent claim 1 has been amended to clarify the patentability of Applicant's novel invention. Claims 8 and 21 are dependent to claim 1. Claim 7 has been cancelled.

Claim 1, as amended, requires at least that the level include at least one end cap having outer and intermediate layers, the outer having higher density than the intermediate layer and an outside contour congruent to the body profile defined by the outside contour at each end of the level. Amended claim 1 also requires the intermediate layer to define a rippled profile, having portions with an outside contour congruent to the body profile that are spaced apart by portions with an outside contour smaller and geometrically similar to the body profile. This novel structure is missing from Wedemeyer. Anticipation requires that the identical invention to that contained in a claim be described in a single prior art reference. Richardson v. Suzuki Motor Co., 868 F.2d 1226, 9 USPQ 2d 1913 (Fed. Cir. 1989).

Wedemeyer discloses a level having a bottom level face 5 for measuring a surface and an I-shaped outside contour for its body profile at both ends. (Wedemeyer at col. 2, lines 59-62; FIGS. 2-4). The protective cap 10 taught by Wedemeyer is not an end cap but a structure placed over the upper surface of the level with side walls engaging the side walls of the level's body. One embodiment of protective cap 10 has inner and outer layers 12B-A, where the inner layer is relatively softer than the outer layer. (Wedemeyer at col. 3, lines 1-5; 24-28).

Wedemeyer does not disclose an end cap having an impact-resisting outer layer and an impact-compressing intermediate layer. The level in the reference does have end caps 4 at both ends of its body 1 but these have none of the limitations set forth in amended claim 1. (Wedemeyer at col. 2, lines 62-63; FIG. 1). In particular, protective cap 10 is not an end cap.

There is also no teaching of any kind with respect to the densities of the two layers of protective cap 10. Less hardness does not equate with lower density. A soft material such as rubber can still have a higher density than a harder material such as wood.

Moreover, the outer layer of the protective cap 10 lacks an outside contour equivalent to the I-shaped body profile at both ends of the level in Wedemeyer. The outside contour of outer layer 12A simply outlines the outside contour of inner layer 12B but for two inward protrusions

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contacting the level's side walls. (FIG.4) Likewise, no portion of inner layer 12B has an outside contour congruent to the level's body profile, much less an adjacent portion with an outside contour smaller but geometrically similar to the body profile. While the outside contour of the inner layer includes webbing along its inner side 11, this webbing is uniform along the length of protective cap 10 and does not contribute to a rippled profile by creating certain portions with a profile similar but smaller than the profile of other portions.

Absent these features, the improved impact-absorbing level set forth in amended claim 1 is not anticipated by Wedemeyer. Applicant respectfully asks that amended claim 1 and each of the claims that depend from it now be allowed.

Claim 21, as amended, adds the limitation that each layer of the end caps have at least one outer surface coplanar with the level face. This claim is allowable at least by virtue of its dependency from amended claim 1. Even if protective cap 10 was considered to disclose an end cap, neither of its layers has an outside surface coplanar with level face 5. (FIG. 4) Only inner layer 12B has a surface coplanar to any surface of the level's body 1. This is, however, an inner surface and it is coplanar to the upper surface of the level which is not a level face for measuring a surface.

For these additional reasons, Applicant believes that the specific rejection of amended claim 21 has been traversed and that it is now in position for allowance.

Rejection of Claim 3 under 35 U.S.C. §103(a)

Claim 3 was rejected as obvious over Wedemeyer in view of Kelch. Claim 3 is allowable at least by virtue of its dependency from amended claim 1. For reasons set forth above, the Wedemeyer reference fails to disclose an end cap with dual-density layers, the outer layer having higher density than the intermediate layer, or an end cap with an outer layer having an outer contour congruent to the body profile and an intermediate layer with a rippled profile. This deficiency is not cured by Kelch, alone or in combination with Wedemeyer. Applicant asks, therefore, that the rejection of claim 3 be specifically withdrawn.

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Rejection of Claim 1, 2, 9, 10 and 17 under 35 U.S.C. §103(a)

Claims 1, 2, 9, 10 and 17 were rejected as obvious over Provi in view of Wedemeyer. Claims 1, 9 and 17 are independent claims. Claims 2 and 10 depend from claims 1 and 9 respectively.

Obviousness under 35 U.S.C. §103(a) can only be established by combining or modifying the teachings of the prior art to produce the claimed invention where there is some teaching, suggestion or motivation to do so found either in the references themselves or in the knowledge generally available to one of ordinary skill in the art. In re Jones, 958 F.2d 347 (Fed. Cir. 1992). In addition, any such combination or modification of the prior art must still teach or suggest each and every one of the claim limitations. MPEP §2143.

Amended claim 1 includes limitations to an end cap on a level having an intermediate layer with lower density than its outer layer where the outer layer has an outside contour congruent to the body profile of the level and the intermediate layer has portions congruent to the body profile spaced apart by portions with an outside contour smaller and geometrically similar to that body profile. The Examiner in the present Office Action acknowledges that the Provi reference does not teach or suggest an end cap having both an impact-resisting outer layer and an impact-compressing intermediate layer. For the reasons stated previously, these elements are also not shown and disclosed by Wedemeyer.

Nowhere in either Provi or Wedemeyer is it taught or suggested that modifying an end cap to have a hard outer layer and a soft inner layer is, in any way, needed or desirable. After all, Wedemeyer itself fails to incorporate the dual-hardness of its protective cap into either of its end caps or make a recommendation to that effect. It is therefore simply an exercise in hindsight for the Examiner to subjectively call upon the supposed level of skill of one skilled in the art and then assert that the desired motivation comes from a need to achieve the very features being claimed: an end cap having an intermediate layer with lower density than its outer layer so that it absorbs impacts to the outer layer to prevent damage to the body of the level. This is not the specific and objective explanation required to be set forth under MPEP §706.02(g).

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Moreover, an examiner may not simply select from the prior art the separate components of the claimed invention through the use of the blueprint supplied by the inventor. Interconnect Planning Corp. v. Feil, 774 F.2d 1132, 227 USPQ 543 (Fed. Cir. 1985). The act of identifying the various elements of the claimed invention in the prior art without there being any teaching, suggestion or motivation for their combination is not the legal test of obviousness. It is, after all, well recognized that most, if not all, inventions are no more than combinations of old elements in the prior art. Environmental Designs, Ltd. V. Union Oil Co., 713 F. 2d 693, 218 USPQ 865 (Fed. Cir. 1983); Richdel, Inc. V. Sunspool Corp., 714 F. 2d 1573, 219 USPQ 8 (Fed. Cir. 1983). "If identification of each claimed element in the prior art were sufficient to negate patentability, very few patents would ever issue. Furthermore, rejecting patents solely by finding prior art corollaries for the claimed elements would permit an examiner to use the claimed invention itself as a blueprint for piecing together elements in the prior art to defeat the patentability of the claimed invention. Such an approach would be 'an illogical and inappropriate process by which to determine patentability.' Sensonics, Inc. v. Aerosonic Corp., 81 F. 3d 1566, 1570, 38 USPQ 2d 1551, 1554 (Fed. Cir. 1996)." In re Rouffet, 47 USPQ 2d at 1457 (Fed. Cir. 1998).

In addition, Provi and Wedemeyer teach against this suggested combination. The protective cap in Wedemeyer requires two side walls to engage the side walls of the level. This design is to enable the cap to introduce the impact energy striking the cap into the side walls of the body and away from the upper surface on which it is placed. (Wedemeyer at col. 3, lines 1-11). To modify the end caps in Provi to have these features would be to create an end cap that extends over the rails 27 to engage the level's metal frame 26. Provi specifically frowns upon, however, any interference with the level surfaces defined by these rails. (Provi at col. 3, lines 22-36; 56-64). The modification proposed by the Examiner would therefore make the level in Provi highly unsatisfactory for its obviously intended purposes.

For all of these reasons, a prima facie case of obviousness has not been established by the Examiner to maintain this alternative rejection of amended claim 1. Applicant believes that this rejection should be therefore withdrawn and that independent claim 1 and each of the claims that depend from it, including claim 2, be allowed.

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Independent claim 9 has been amended to clarify its patentability. Amended claim 9 includes limitations drawn from claims 12 and 13, now cancelled. Applicant appreciates the indication of allowable subject matter in claims 12 and 13. Neither Provi nor Wedemeyer, alone or combination, teach or suggest an end cap having an outer layer, an intermediate layer contiguous with the outer layer, and an inner layer connecting the intermediate layer to the body of the level where the intermediate layer has a lower density than the outer and inner layers.

Amended claim 9 is therefore not anticipated or made obvious by any of the references cited by the Examiner, alone or in combination, since it has limitations neither taught nor suggested by any of them. This claim and each claim dependent to it, including claim 10, is in condition for immediate allowance.

Independent claim 17 has also been amended to clarify its patentability. Amended claim 17 is directed to a method of providing impact-absorption to a level requiring adhering a dual-density end cap to each end of a level where, among other limitations, each end cap extends outward from its respective end within that end's outside contour. Each end cap also has an intermediate layer that is connected with respect to the level's end and an outer layer spaced apart from the end by the intermediate layer to which it is secured. Moreover, each layer has at least one outer surface coplanar with the level face on the body of the level for measuring a surface and the outer layer has a greater density than the intermediate layer.

For each of the reasons set forth above with respect to the traversal of the obviousness rejection of claim 1, none of the references cited by the Examiner, alone or in combination, teach or suggest an end cap having outer and intermediate layers, the outer layer having a greater density than the intermediate layer. In addition, as stated earlier with respect to the allowability of amended claim 21, Wedemeyer fails to show or disclose these layers as having at least one outer surface coplanar with a level face. This feature is missing as well from Provi.

Moreover, as pointed out above, there are no reasons or motivations taught or suggested within either Provi or Wedemeyer to support the modification relied upon by the Examiner for the rejection of claim 17. Quite to the contrary, as explained with respect to the patentability of

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amended claim 1, Provi and Wedemeyer have teachings that are opposed to this suggested combination.

Applicant believes therefore that the rejection of claim 17 should be withdrawn and that amended claim 17, in addition to each claim that is dependent to it, be allowed.

Conclusion

Applicant's invention, as set forth in the pending claims, represents a novel level having highly desirable impact-absorbing end caps. Applicant believes that now pending claims 1-5, 8-10, 15-23 each have elements that are not disclosed or suggested in the prior art. Applicant respectfully submits that all rejections in the Office Action have been traversed by amendment and argument, placing the application in condition for allowance. Early favorable action is earnestly solicited. The Examiner is invited to call the undersigned if such would be helpful in resolving any issue that may remain.

Respectfully submitted,



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Dated: February 14, 2006

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